

CLAIMS

1. A recording and reproducing apparatus for recording a packet stream containing AV transport packets and data table packets for managing the AV transport packets, comprising:

5 a demultiplexer for demultiplexing a first packet stream into AV transport packets and data table packets;

an AV decoder for decoding the AV transport packets and outputting AV data;

10 an AV encoder for encoding the AV data and outputting second AV transport packets;

a data table packet generator for constructing second data table packets for managing the second AV transport packets based on the data table packets; and

15 a multiplexer for multiplexing the second AV transport packets and second data table packets, and outputting a second packet stream.

2. A recording and reproducing apparatus as described in claim 1, further comprising a digital tuner for receiving and demodulating digital broadcasts; and

20 a storage controller for recording the first packet stream or second packet stream;

wherein the first packet stream or the second packet stream stored in the storage controller is input to the demultiplexer.

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3. A recording and reproducing apparatus as described in claim 1, wherein said data table packet generator adds parental control information contained in the first packet stream to the second

data table packets.

4. A recording and reproducing apparatus as described in claim 1, wherein said data table packet generator adds copying
5 control information contained in the first packet stream to the second data table packets.

5. A recording and reproducing apparatus as described in claim 1, wherein said data table packet generator adds parental
10 control information contained in the first packet stream to the management information for managing the second AV transport packets.

6. A recording and reproducing apparatus as described in claim 1, wherein said data table packet generator adds copying
15 control information contained in the first packet stream to the management information for managing the second AV transport packets.

20 7. A recording and reproducing apparatus as described in claim 1, further comprising a program table data processor for collecting program information from the first packet stream or second packet stream and generating a program table; and

a user interface unit for receiving user input;

25 wherein the demultiplexer outputs the AV transport packets and data table packets for a program selected from the user interface unit.

8. A recording and reproducing apparatus as described in claim 2, wherein the storage controller records the first packet stream or second packet stream based on input from the user interface unit.

5 9. A recording and reproducing apparatus as described in claim 7, wherein the AV encoder determines the compression rate based on input from the user interface unit.

10 10. A recording and reproducing apparatus as described in claim 3, further comprising an age setting unit for inputting a viewer age.

15 11. A recording and reproducing apparatus as described in claim 5, further comprising an age setting unit for inputting a viewer age.

12. A recording and reproducing method for recording a packet stream containing AV transport packets and data table packets for managing the AV transport packets, comprising:

20 a first step for demultiplexing a first packet stream into AV transport packets and data table packets;

a second step for decoding the AV transport packets and outputting AV data;

25 a third step for encoding the AV data and outputting second AV transport packets;

a fourth step for constructing second data table packets for managing the second AV transport packets based on the data table packets; and

a fifth step for multiplexing the second AV transport packets and second data table packets, and outputting a second packet stream.

5 13. A recording and reproducing method as described in claim 12, further comprising a sixth step for receiving and demodulating digital broadcasts; and

 a seventh step for determining a recording program to be recorded from the digital broadcast received in the sixth step;

10 wherein the first step demultiplexes the packet stream of the recording program determined in the seventh step into AV transport packets and data table packets.

14. A recording and reproducing method as described in claim 15 12, wherein in the fourth step, parental control information contained in the first packet stream is added to the second data table packets.

15. A recording and reproducing method as described in claim 20 12, wherein in the fourth step, copying control information contained in the first packet stream is added to the second data table packets.

16. A recording and reproducing method as described in claim 25 12, wherein in the fourth step, parental control information contained in the first packet stream is added to the management information for managing the second AV transport packets.

17. A recording and reproducing method as described in claim 12, wherein in the fourth step, copying control information contained

in the first packet stream is added to the management information for managing the second AV transport packets.

18. A recording and reproducing method as described in claim
5 14, further comprising a step for entering a viewer age.

19. A computer-readable recording medium recording a
program for executing on a computer the steps described in claim 12.

10 20. A program for executing on a computer the steps
described in claim 12.